
ISOLATION

1. SCOPE

This procedure describes the requirements, responsibilities and process for the Isolation procedure at **Company Name**.

This document applies to:

- 1) All persons performing work for **Company Name**;
- 2) All equipment, processes and systems that have the potential to release, or cause the release of uncontrolled hazardous energy while being worked on (with the exception of some live tests, test section changes and sampling procedures conducted under the control of prescribed and approved work procedures or protocols where work cannot be done if the equipment/system is isolated and/or neutralized).
- 3) Activities such as, but not limited to, the erection, installation, construction, commissioning, repair, adjustment, inspection, cleaning, modification or maintenance, decommissioning or dismantling of equipment or process systems, and
- 4) Energy sources such as, but not limited to, electrical, mechanical, hydraulic, pneumatic, chemical, radiation, thermal, compressed air, pressurized gases/liquids, energy stored in springs, and potential energy from suspended parts (gravity).
- 5) Appropriate job and/or facility-specific procedures may exist to supplement this procedure where this procedure is not adequate to protect personnel and equipment.

2. PURPOSE

The Isolation procedure is used to safeguard personnel and property from the unexpected release or transmission of equipment/process energy during the performance of work, in compliance with applicable legislation.

3. DEFINITIONS

Authorized person: An individual whose defined job duties include the requirement to operate energy isolating devices for the purpose of isolating or neutralizing equipment, machines or systems for the protection of personnel and/or equipment.

Energy Isolating Device: A mechanical device that physically prevents the transmission or release of energy including, but not limited to, disconnect switches, line valves, line blanks, spool pieces, a mechanical block or any similar device used to block or isolate energy. This term does not include pushbuttons, selector micro switches and other control circuit type devices.

Isolate: To disconnect equipment or systems from their energy sources.

Lock Box: A device used for group lockouts in which unique keys of the safety locks used in equipment isolations are placed.

Lock Out: The placement of a lock out device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lock out device is removed.

Lock Out Device: A device, such as a substantial, keyed padlock, that provides a positive means of securing an energy isolating device in a safe position, and preventing the energizing of a machine, process or piece of equipment.

Personal Protection Lock Out Devices: Those used by workers for their own protection while working on equipment/systems. These devices must be uniquely keyed.

Tag Out: The placement of a signed and dated tag out device on an energy isolating device, in accordance with an established procedure. To indicate that the energy isolating device and the equipment being controlled may not be operated until the tag out device is removed.

Personal Protection Tag: A warning device such as a tag, and a means of attachment, which can be securely fastened to a lock out device or an energy isolating device in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tag out device and its accompanying lock out device have been removed. **(See Appendix A)**

4. REQUIREMENTS

4.1 General

- 1) General requirements for all isolation applications include the following:
- 2) All work that requires the application of the isolation procedure shall be conducted under the control of the Isolation Permit System.**(See Appendix B)**
- 3) Installation and removal of lock outs/tag outs shall be carried out in compliance with this procedure
- 4) Prior to the start of work on equipment, all energy isolating and control devices that, if operated, could cause potentially hazardous conditions, shall be isolated and tagged out, and the effectiveness of the isolations shall be tested.
- 5) Where equipment has been isolated, all personnel assigned to work on the equipment shall apply their Personal Lock.
- 6) Personal Locks shall only be used by, and for the protection of, the individual to whom they have been assigned. Never apply or remove another individual's personal lock(s).
- 7) Unauthorized removal or violation of a lock out or tag out device by an employee is subject to disciplinary action up to and including dismissal.

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- 8) Lock Out/ Tag Out devices shall not be used for any purposes other than those specified in this procedure.

4.2 Tag Out Devices

4.2.1 Personal Protection Tag

Personal Protection Tag out Devices (**See Appendix A**) are to be used in conjunction with personal protection lock out devices in order to protect workers from the unexpected release or transmission of energy while they are working on isolated or neutralized machines, equipment or systems.

4.3 Lock Out Devices

Safety lock out devices shall consist of substantial, keyed padlocks, and any required accompanying adapters.

4.4 Violations

Unauthorized removal or violation of a lock out or tag out device by employees is subject to disciplinary action up to and including dismissal.

5 PROCESS

5.1 Records

Isolation Permit: Required where the use of lock out and/or tag out devices is required for a job, the requirement for isolation, locking out and applying appropriate tag out devices to the involved energy isolating and control devices.(See Appendix A)

Tag-Out Devices: Workers applying tag out devices shall sign (including name and employee number) and date them at the time of application, and clearly and concisely indicate on the tag the reason for its application where practicable.

5.2 Instructions

Supervisor

- 1) Before the work is started, ensures that the Work Permit System procedure has been applied, and that every system, machine or piece of equipment that could affect the safety or health of personnel:
 - a) Has been isolated, neutralized, drained, vented, blanked off and cleaned (if necessary) according to the Isolation Permit.

Workers

Must become familiar with all energy isolating and control devices that apply to the equipment being locked and tagged. Questions concerning the identification of energy sources shall be resolved with their Supervisors and/or the equipment or system owner or operator. When technical guidance in isolating the equipment/system is required, he/she shall consult with the applicable technical specialist(s). Never assume that clean, safe conditions exist with any equipment. Equipment condition must be verified before work starts.

Supervisor

Following completion of the above noted preparations, shall ensure that the appropriate energy isolating and control devices are properly adjusted, locked out with equipment protection lock out devices, and tagged out.

Workers

Place their personal protection lock out and tag out devices on all applicable energy isolating and control devices as identified by their supervisor, the equipment owner/operator, applicable work procedures, and/or the Isolation Permit.

Supervisor

Shall, before any work is started, verify that all equipment has been effectively isolated.

Workers

On completion of their portion of the work, at the end of the work day/shift, workers shall remove their personal protection lockout and tag out devices.



Appendix B

ISOLATION PERMIT

1.0 ISOLATION PERMIT			
Permit Expiry Time:		Location of Work:	
Proposed Date of Work:		Date of Permit Issue:	

2.0 DESCRIPTION OF WORK

3.0 LIST THE POTENTIAL HAZARDS			

Note: A COPY OF THIS PERMIT MUST BE POSTED IN A CONSPICUOUS PLACE AND READILY AVAILABLE FOR REVIEW

4.0 ISOLATION and GENERAL PRECAUTIONS WHICH WILL BE INSTALLED			
	Y	N	NA
Warning notices/Tags/Signs/ Barriers in place.			
Energy source disconnected?			
Valve lockouts placed?			
Circuit breaker lockouts placed?			

Appendix C

Examples of Proper Isolation



Appendix D

Examples of Proper Isolation

